

AMENDMENTS TO THE CLAIMS

1.16. (canceled)

17. (previously presented) A process for preparing a denture, comprising:

- a) preparing a blank,
- b) rough processing the blank by milling,
- c) fine processing the blank by milling,
- c) dense sintering the milled blank in a temperature range from 1200 to 1650°C,
the blank comprising a pre-sintered material and having a raw breaking resistance from 15 to 28 MPa.

18. (previously presented) The process according to claim 17, in which the blank has a raw breaking resistance of 23 to 28 MPa.

19. (previously presented) The process according to one of claim 17 or 18, in which, during the milling of the blank, a tool of a processing machine operates at a speed of 5,000 to 40,000 rpm and a feed rate of 20 to 5,000 mm/min during the rough processing and a speed of 5,000 to 50,000 rpm and a feed rate of 20 to 5,000 mm/min during fine processing and in both rough processing and fine processing with a milling diameter of 0.8 to 4 mm.

20. (previously presented) The process according to claim 17, in which the blank is processed from a side that contacts a tooth stump and from a side that does not contact a tooth stump.

21. (previously presented) The process according to claim 17, the pre-sintered blank comprising a zirconium oxide or an aluminium oxide ceramic.

22. (previously presented) A denture part prepared according to the process of claim 17.

23. (currently amended) A pre sintered blank made from zirconium oxide ceramic, comprising:

- (A) 91 to 98.45 wt.-% zirconium oxide,
- (B) 0 to 3.5 wt.-% hafnium oxide,
- (C) 1.5 to 6.0 wt.-% yttrium oxide,
- (D) 0.05 to 0.50 wt.-% of at least one of the oxides of the elements aluminium, gallium, germanium, indium,
- (E) 0 to 1.9 wt.-% coloring additives, calculated as oxides,
the wt.-% adding up to 100 and the blank having a raw breaking resistance of 15 to 30
Mpa; the blank having been pre-sintered at a temperature of from 850°C to 1000°C.

24. (previously presented) The pre-sintered blank according to claim 23 comprising:

- (A) 91 to 98.35 wt.-% zirconium oxide,
- (B) 0 to 2.5 wt.-% hafnium oxide,
- (C) 1.5 to 6.0 wt.-% yttrium oxide,
- (D) 0.15 to 0.50 wt.-% of at least one of the oxides of the elements aluminium, gallium, germanium, indium,
- (E) 0 to 1.9 wt.-% coloring additives,
the wt.-% adding up to 100.

25. (previously presented) The pre-sintered blank according to claim 23 comprising:

- (A) 91 to 98.45 wt.-% zirconium oxide,
- (B) 0 to 3.5 wt.-% hafnium oxide,
- (C) 1.5 to 6.0 wt.-% yttrium oxide,
- (D) 0.05 to 0.50 wt.-% aluminium oxide,
- (E) 0 to 1.9 wt.-% coloring additives,
the wt.-% having to add up to 100.

26. (previously presented) The pre-sintered blank according to claim 23, having a raw breaking resistance of 25 to 28 MPa.

27. (previously presented) The pre-sintered blank according to claim 24, having a raw breaking resistance of 25 to 28 MPa.

28. (previously presented) The pre-sintered blank according to claim 25, having a raw breaking resistance of 25 to 28 MPa.

29. – 30. (canceled)

31. (previously presented) The pre-sintered blank according to claim 23 that has a deviation from the linearity of the shrinkage per spatial direction below 0.05%.

32. (currently amended) The pre-sintered blank according to ~~claim 29~~claim 24 that has a deviation from the linearity of the shrinkage per spatial direction below 0.05%.

33. (currently amended) The pre-sintered blank according to ~~claim 30~~claim 25 that has a deviation from the linearity of the shrinkage per spatial direction below 0.05%.

34. (currently amended) The process according to claim 17, in which, a pre-sintered the blank is made from a zirconium oxide ceramic, comprising:

- (A) 91 to 98.45 wt.-% zirconium oxide,
- (B) 0 to 3.5 wt.-% hafnium oxide,
- (C) 1.5 to 6.0 wt.-% yttrium oxide,
- (D) 0.05 to 0.50 wt.-% of at least one of the oxides of the elements aluminium, gallium, germanium, indium,
- (E) 0 to 1.9 wt.-% coloring additives, calculated as oxides,

the wt.-% adding up to 100, and the blank having a raw breaking resistance of 15 to 30 Mpa, ~~is milled into the milling steps c) and d) provide~~ a shrinkage-matched, enlarged model of an end denture and ~~densely sintered to the~~ ~~the dense sintering step d) produces a denture of having the~~ end dimensions of the enlarged model.

35. (previously presented) The process of claim 34 in which the milling to a shrinkage-matched, enlarged model of the end dentures is controlled by a CAD/CAM software.

36. (previously presented) The process of claim 34, in which the pre-sintered blank is aesthetically re-processed after the processing and densely sintered to the end dimensions of the enlarged model.

37. (new) The method of claim 17, in which the pre-sintered material has been pre-sintered at a temperature of from 850 to 1000 °C.

38. (new) The method of claim 17, in which the pre-sintered material has been pre-sintered at from 850 to 1000 °C for a period of from 0.5 to 4 hours.

39. (new) The method of claim 34, in which the pre-sintered material has been pre-sintered at from 850 to 1000 °C for a period of from 0.5 to 4 hours.

40. (new) The blank of claim 23, which has been pre-sintered at from 850 to 1000 °C for from 0.5 to 4 hours.